

REMARKS

Claims

By the Office Action dated May 2, 2007, the Examiner has objected to the Claims. Claims 1-9, 11, 13, and 18-22 have been cancelled. Applicants respectfully submit that
5 claims 10, 12, and 14-17 comply with the requirements of 37 CFR.

35 U.S.C. § 102 Claim Rejections

Claims 1-7 and 18-22

Claims 1-9, 11, 13, and 18-22 have been cancelled. Applicants respectfully submit that claims 10, 12, and 14-17 comply with the requirements of 35 U.S.C. § 102.

10 **35 U.S.C. § 103 Claim Rejections**

Claims 10, 12, and 14-17

By the Office Action dated May 2, 2007, the Examiner has rejected claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Holtzman as applied to claim 1 further in view of Fan (U.S. Patent No. 5,371,673) (hereinafter "Fan"). In order to form a proper
15 obviousness rejection of a claim under 35 U.S.C. § 103(a), a collection of references together must teach or suggest each element of the claim, including the relationships between the elements. If any element is not fully taught by the combined references, the rejection cannot be sustained.

Evaluating Holtzman in view of Fan in this light, it is appropriate to examine the
20 portions of Holtzman in view of Fan that the Examiner has pointed to as teaching the claimed elements of the rejected claims.

Claim 10

The Examiner asserted that "[r]e claim 10, Holtzman et al discloses the extraction of information from text and the identification of an opinion as well as the opinion polarity
25 (positive, neutral, or negative mood)." (See Office Action, page 8.) The Examiner admitted that "Holtzman et al fails to disclose the use of a dictionary to analyze input text strings." (See Office Action, page 8.) The Examiner then asserted

Fan discloses this system that determines opinion(s) from text
30 by comparing terms within a text to a dictionary array. Fan also discloses a method to parse text to identify information.

Therefore, the combined teaching of Holtzman et al and Fan would have rendered obvious utilization of a method to identify opinions and opinion polarity through the comparison of data stored within a dictionary. (Col. 9 line 17-21, Col. 27 line 66 – Col. 28 line 4)

(See Office Action, page 8.)

To the extent the Examiner's language at page 8 of the Office Action can be understood, it appears that the Examiner has asserted the following correspondence between Holtzman and Fan and claim 8:

Claim 10	<u>Holtzman</u>	<u>Fan</u>
10. A method for extracting opinions about a subject of interest from a text document having a plurality of sentences, the subject associated with a plurality of features, the method comprising:	-	<u>Fan</u> does not teach this claim element.
extracting from the document feature terms related to the features most relevant to the subject;	-	<u>Fan</u> does not teach this claim element.
for each sentence referring to a feature term, determining whether the sentence includes an opinion polarity about the feature term; and	-	<u>Fan</u> does not teach this claim element.
for each sentence referring to the subject,	-	<u>Fan</u> does not teach this claim element.

<p>determining whether the sentence includes an opinion polarity about the subject,</p> <p>wherein the determining comprises</p> <p><i>identifying opinion terms in the sentence using an opinion dictionary, each entry in the dictionary having an opinion term, a part-of-speech tag, and an associated opinion polarity,</i></p> <p><i>for each sentence having a feature term and an opinion term, parsing the sentence with an English parser to identify grammatical components in the sentence and relationships between said components, and</i></p> <p><i>identifying an opinion polarity associated with said feature term using the opinion dictionary.</i></p>	<p><u>Holtzman</u> does not teach this claim element.</p>	<p><u>Fan</u> does not teach this claim element.</p>
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In reviewing the cited portions of Holtzman and Fan, however, it becomes apparent that Holtzman and Fan have been generalized, and, in fact, does not support the position asserted by the Examiner.

5 wherein the determining comprises identifying opinion terms in
 the sentence using an opinion dictionary, each entry in the dictionary having an
 opinion term, a part-of-speech tag, and an associated opinion polarity, for each
 sentence having a feature term and an opinion term, parsing the sentence with
 an English parser to identify grammatical components in the sentence and
10 relationships between said components, and identifying an opinion polarity
 associated with said feature term using the opinion dictionary

In particular, Holtzman and Fan, alone or in combination, fail to teach or suggest “wherein the determining comprises *identifying opinion terms in the sentence using an opinion dictionary, each entry in the dictionary having an opinion term, a part-of-speech tag, and an associated opinion polarity, for each sentence having a feature term and an*
15 *opinion term, parsing the sentence with an English parser to identify grammatical components in the sentence and relationships between said components, and identifying an opinion polarity associated with said feature term using the opinion dictionary*”, as required by claim 10. The Examiner admitted that “Holtzman et al fails to disclose the use
20 of a dictionary to analyze input text strings.” (See Office Action, page 8.) Thus, Holtzman cannot teach or suggest “wherein the determining comprises *identifying opinion terms in the sentence using an opinion dictionary, each entry in the dictionary having an opinion term, a part-of-speech tag, and an associated opinion polarity, for each sentence having a*
25 *feature term and an opinion term, parsing the sentence with an English parser to identify grammatical components in the sentence and relationships between said components, and identifying an opinion polarity associated with said feature term using the opinion*
 dictionary”. Fan discloses that “[i]n the preferred embodiment, words were defined as an arbitrary string of characters. With this definition, comparisons between words in the text and words in the dictionary were performed by permitting a word to start at any character
30 in the text.” (See Fan, col. 27, line 28 to col. 28, line 4.) Thus, Fan does not teach “*each entry in the dictionary having . . . a part-of-speech tag*” and “*parsing the sentence with an*

*English parser to identify grammatical components in the sentence”. Thus, Fan cannot teach or suggest “wherein the determining comprises *identifying opinion terms in the sentence using an opinion dictionary, each entry in the dictionary having an opinion term, a part-of-speech tag, and an associated opinion polarity, for each sentence having a**

5 *feature term and an opinion term, parsing the sentence with an English parser to identify grammatical components in the sentence and relationships between said components, and identifying an opinion polarity associated with said feature term using the opinion dictionary”.* Therefore, Holtzman and Fan, alone or in combination, cannot teach or suggest the claim 10 element of “wherein the determining comprises *identifying opinion*

10 *terms in the sentence using an opinion dictionary, each entry in the dictionary having an opinion term, a part-of-speech tag, and an associated opinion polarity, for each sentence having a feature term and an opinion term, parsing the sentence with an English parser to identify grammatical components in the sentence and relationships between said*

components, and identifying an opinion polarity associated with said feature term using

15 *the opinion dictionary”.* It is therefore clear that Holtzman and Fan, alone or in combination, cannot teach or suggest each element of claim 10 and, therefore, a rejection of claim 10 under 35 U.S.C. § 103(a) would be inappropriate.

Claim 12

Since dependent claim 12 depends on claim 10 and since Holtzman and Fan, alone

20 or in combination, cannot teach or suggest each element of claim 10, Holtzman and Fan, alone or in combination, cannot teach or suggest each element of claim 12, and, therefore, a rejection of claim 12 under 35 U.S.C. § 103(a) is inappropriate.

Claims 14 and 15

Since dependent claims 14 and 15 depend on dependent claim 12 and since

25 Holtzman and Fan, alone or in combination, cannot teach or suggest each element of claim 12, Holtzman and Fan, alone or in combination, cannot teach or suggest each element of claim 14 or claim 15, and, therefore, a rejection of claim 14 or claim 15 under 35 U.S.C. § 103(a) is inappropriate.

Claims 16 and 17

30 Since dependent claims 16 and 17 depend on dependent claim 15 and since Holtzman and Fan, alone or in combination, cannot teach or suggest each element of claim

15, Holtzman and Fan, alone or in combination, cannot teach or suggest each element of claim 16 or claim 17, and, therefore, a rejection of claim 16 or claim 17 under 35 U.S.C. § 103(a) is inappropriate.

Conclusion

5 It is therefore clear that claims 8, 10, 12, and 14-17 comply with the requirements of 35 U.S.C. §§ 101, 102, 103, and 112. The application is therefore in condition for allowance. Early notification to that effect is respectfully solicited.

 In the event that any issue remains unresolved, the Examiner is invited to telephone the undersigned at 408-927-3377.

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Respectfully Submitted,



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